

Form PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO. 016754-0206	SERIAL NO. 09/7,9
INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>		APPLICANT David M. ANDERSON et al	
		FILING DATE 12/08/2000	GROUP ART UNIT 15

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U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS								
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
							YES	NO
mm2	A1	0 477 739 A2	04/01/92	EPO	—	—	X	
mm2	A2	97/41739	11/13/97	WIPO	—	—	x	

OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>		
mm2	A3	KUPPE, A., "Phosphatidylinositol-Specific Phospholipase C of Bacillus cereus: Cloning, Sequencing, and Relationship to Other Phospholipases", Journal of Bacteriology, Nov. 1989 pgs. 6077-6083, (1989).
	A4	BARBIS D. P. et al., "Characterization of Canine Parvovirus (CPV) Interactions with 3201 T-Cells: Involvement of GPI-Anchored Protein (s) in Binding and infection", Brazilian Journal of Medical And Biological Research, pgs. 401-407, (1994), (abstract).
mm2	A5	GORDON, V. M. et al., "Clostridium septicum Alpha Toxin Uses Glycosylphosphatidylinositol-Anchored Protein Receptors", Journal of Biological Chemistry, 9/17/99, vol. 274, No. 38, pgs. 27274-27280, (1999).

EXAMINER mm2	DATE CONSIDERED 2/20/02
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Form PTO-1449
(MODIFIED)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
016754-0206SERIAL NO.
09/731,971

APPLICANT

David M. ANDERSON *et al.*

FILING DATE

December 8, 2000

GROUP ART UNIT

1652

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
mmr	A1	4,079,125	03/14/78	Sipos	424	32	
	A2	4,877,738	10/31/89	Handelsman et al.	435	252.5	
	A3	4,891,319	01/02/90	Roser	435	188	
	A4	5,049,379	09/17/91	Handelsman et al.	424	115	
mmr	A5	5,429,828	07/04/95	Fodge et al.	426	18	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
							YES	NO
mmr	A6	55-34039	10/1980	Japan	—	—		X
mmr	A7	00/21381	10/15/99	WO	—	—		

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

mmr	A8	Abraham et al., "Conservation of the D-Mannose-Adhesion Protein Among Type 1 Fimbriated Members of the Family Enterobacteriaceae," Nature 336: 682-684, 1988					
	A9	Adams, "Enzymes Are Important Components in Antibiotic-free Poultry Feeds," Feed Mix (Special 2000), pp. 16-18					
	A10	Aldridge, "Trehalose Boosts Prospects for Improved Biopharmaceuticals and Vaccines," Genetic Engineering News, pp. 10-11 (1995)					
	A11	Arnold, F., "When Blind is Better: Protein Design by Evolution," Nature Biotechnol., vol. 16, pp. 617-618 (1998)					
	A12	Arrowwood et al., "A New Method for Evaluating Experimental Cryptosporidial Parasite Loads Using Immunofluorescent Flow Cytometry," J. Parasitol, vol. 81, pp. 404-409 (1995)					
mmr	A13	Augustine, P., "Cellular Invasion by Avian Eimeria Species," Avian and Poultry Biology Review, vol. 11, pp. 113-122 (2000)					

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A14		Barbis et al., "Characterization of Canine Parvovirus (CPV) Interactive with 3201 T Cells: Involvement of GPI-anchored Protein(s) in Binding and Infection," Brazilian J. Med. Biol. Res., vol. 27, pp. 401-407 (1994)					
A15		Bergelson et al., "Decay-accelerating Factor (CD55), a Glycosylphosphatidylinositol-anchored Complement Regulatory Protein, is a Receptor for Several Echoviruses," Proc. Natl. Acad. Sci. USA, vol. 91, pp. 6245-6248 (1994)					
A16		Brantner, A., "Bewertung von Arzneibuchmethoden zur Bestimmung der Antimikrobiellen Wirksamkeit unter Besonderer Berücksichtigung von Naturstoffen," Pharmazie, vol. 52, no. 1, pp. 34-40 (1997)					
A17		Cevallos et al., "Molecular Cloning and Expression of a Gene Encoding Cryptosporidium Parvum Glycoproteins gp40 and gp15," Infection and Immunity, vol. 68, no. 7, pp. 4108-4116 (2000)					
A18		Clarkson et al., "Characterization of the Echovirus 7 Receptor: Domains of CD55 Critical for Virus Binding," Journal of Virology, vol. 69, no. 9, pp. 5497-5501 (1995)					
A19		Colaco et al., "Extraordinary Stability of Enzymes Dried in Trehalose: Simplified Molecular Biology," Bio/Technology, vol. 10, pp. 1007-1011 (1992)					
A20		Cherry et al., "Directed Evolution of a Fungal Peroxidase," Nature Biotechnology, vol. 17, pp. 379-384 (1999)					
A21		Crameri et al., "DNA Shuffling of a Family of Genes from Diverse Species Accelerates Directed Evolution," Nature, vol. 391, pp. 288-291 (1998)					
A22		Essen et al., "Crystal Structure of a Mammalian Phosphoinositide-specific Phospholipase C δ ," Nature, vol. 380, pp. 595-602 (1996)					
A23		Essen et al., "A ternary Metal Binding Site in the C2 Domain of Phosphoinositide-Specific Phospholipase C- δ 1," Biochemistry, vol. 36, pp. 2753-2762 (1997)					
A24		Fodge et al., "Post-pelleting Application of Heat-labile Products Explored," Feedstuffs, vol. 29, no. 40, pp. 1-7 (1997)					
A25		Franks et al., "Materials Science and the Production of Shelf-Stable Biologicals," BioPharm, vol. 4, no. 9, pp. 38, 40-42 and 55 (1991)					
A26		Friedman et al., "Specific Inhibition of Virus Growth in Cells Treated with Phospholipase C," Proc. NAS, vol. 59, pp. 1371-1378 (1968)					
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
mm2	A27	Gilmore et al., "A Bacillus Cereus Cytolytic Determinant, Cereolysin AB, Which Comprises the Phospholipase C and Sphingomyelinase Genes: Nucleotide Sequence and Genetic Linkage," Journal of Bacteriology, vol. 171, no. 2, pp. 744-753 (1989)					
mm2	A28	Giver et al., "Directed Evolution of a Thermostable Esterase," Proc. Natl. Acad. Sci. USA, vol. 95, pp. 12809-12813 (1998)					
	A29	Griffith et al., "Phosphatidylinositol-Specific Phospholipases C from Bacillus Cereus and Bacillus Thuringiensis," Methods in Enzymology, vol. 197, pp. 493-502					
mm2	A30	Gurnett et al., "A Family of Glycolipid Linked Proteins in Eimeria Tenella," Molecular and Biochemical Parasitology, vol. 41, pp. 177-186 (1990)					
	A31	Hawn et al., "Detection and Partial Characterization of Glycosylphosphatidylinositol-specific Phospholipase Activities from Fasciola Hepatica and Schistosoma Mansonii," Molecular and Biochemical Parasitology, vol. 59, pp. 73-82 (1993)					
	A32	Hendrickson et al., "A Fluorescent Substrate for the Assay of Phosphatidylinositol-Specific Phospholipase C: 4-(1-Pyreno)Butylphosphoryl-1-myo-Inositol," Bioorganic & Medicinal Chemistry Letters, vol. 1, no. 11, pp. 619-622 (1991)					
	A33	Hendrickson, H.S., "Fluorescence-Based Assays of Lipases, Phospholipases, and Other Lipolytic Enzymes," Analytical Biochemistry, vol. 219, pp. 1-8 (1994)					
	A34	Hendrickson et al., "Kinetics of Bacillus Cereus Phosphatidylinositol-Specific Phospholipase C with Thiophosphate and Fluorescent Analogs of Phosphatidylinositol," Biochemistry, vol. 31, pp. 12169-12172 (1992)					
	A35	Henry, C.M., "The Specter of Antibiotic Resistance Has Engaged Pharmaceutical and Biotechnology Companies to Seek New Weapons to Battle Infections," Science/Technology, vol. 78, no. 10, pp. 41-58 (2000)					
mm2	A36	Hooge, D. M., "Antibiotics and Their Alternatives for Poultry Examined," Feedstuffs, vol. 71, no. 20, pp. 1-7 (1999)					
	A37	Ikezawa et al., "Phosphatidylinositol-Specific Phospholipase C from Bacillus Cereus and Bacillus Thuringiensis," Methods in Enzymology, vol. 71, pp. 731-741					
mm2	A38	Ikezawa et al., "Studies on Phosphatidylinositol phosphodiesterase (Phospholipase C Type) of Bacillus Cereus," Biochimica et Biophysica Acta, vol. 450, pp. 154-164 (1976)					
mm2	A39	Jacobs et al., "Dengue Virus Nonstructural Protein 1 is Expressed in a Glycosyl-phosphatidylinositol-linked Form That Is Capable of Signal Transduction," The FASEB Journal, vol. 14, pp. 1603-1610 (2000)					
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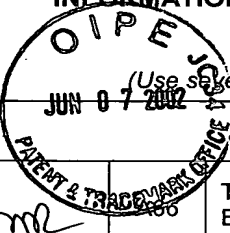
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mm2	A40	Karlsson, "Animal Glycosphingolipids As Membrane Attachment Sites for Bacteria," Annu. Rev. Biochem., vol. 58, pp. 309-350 (1989)	
	A41	Kamogashira et al., "Isolation of Tunicamycin Produced by Bacillus Cereus K-279," Gric. Biol. Chem., vol. 52, no. 3, pp. 859-861 (1988)	
	A42	Karnauchow et al., "The HeLa Cell Receptor for Enterovirus 70 Is Decay-Accelerating Factor (CD55)," Journal of Virology, vol. 70, no. 8, pp. 5143-5152 (1996)	
	A43	Kudo, S., "Enzymatic Basis for Protection of Fish Embryos by the Fertilization Envelope," Experientia 48, pp. 227-281 (1992)	
	A44	Lanzrein et al., "GPI-anchored Diphtheria Toxin Receptor Allows Membrane Translocation of the Toxin Without Detectable Ion Channel Activity," The EMBO Journal, vol. 15, no. 4, pp. 725-734 (1996)	
	A45	Liao et al., "Isolation of a Thermostable Enzyme Variant by Cloning and Selection in a Thermophile," Proc. Natl. Acad. Sci. USA, vol. 83, pp. 576-580 (1986)	
	A46	Lovell-Badge, R., "A Freeze-Dryer and a Fertile Imagination," Nature Biotechnology, vol. 16, pp. 618-619 (1998)	
	A47	Low et al., "Structural and Functional Roles of Glycosyl-Phosphatidylinositol in Membranes," Science, vol. 239, pp. 268-275 (1988)	
	A48	Low et al., "Modification of Erythrocyte Membrances by a Purified Phosphatidylinositol-Specific Phospholipase C (Staphylococcus aureus)," Biochem. J., vol. 162, pp. 235-240 (1977)	
	A49	Low, et al. "A Phospholipase D Specific for the Phosphatidylinositol Anchor of Cell-Surface Proteins is Abundant in Plasma," Proc. Natl. Acad. Sci. USA, vol. 85, pp. 980-984 (1988)	
	A50	Malaviya et al., Proc. Natl. Acad. Sci. USA 96: 8110-8115 (1999)	
	A51	McConville et al., "Structure, Biosynthesis and Function of Glycosylated Phosphatidylinositols in the Parasitic Protozoa and Higher Eukaryotes," Biochemical Journal, vol. 294, pp. 305-324 (1993)	
	A52	Miller D.J.S., "Antibiotic Usages in Food Animal Production and Resistance – European Perspective," USAHA Proceedings (1999)	
mm2	A53	Muirhead S., "FDA/CVM Proposes to Withdraw Poultry Use of Fluoroquinolones," Feedstuffs, vol. 72, no. 45, pp. 1-4 (2000)	
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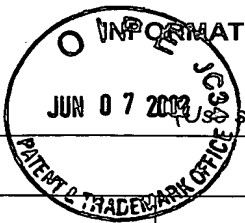
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A54		Nishihara et al., "Archaea Contain a Novel Diether Phosphoglycolipid with a Polar Head Group Identical to the Conserved Core of Eucaryal Glycosyl Phosphatidylinositol," The Journal of Biological Chemistry, vol. 267, no. 18, pp. 12432-12435 (1992)					
A55		Pearce et al., "Three Major Surface Antigens of Schistosoma Mansoni Are Linked to the Membrane by Glycosylphosphatidylinositol," The Journal of Immunology, vol. 142, no. 3, pp. 979-984 (1989)					
A56		Roser B., "Trehalose Drying: A Novel Replacement for Freeze-Drying," Biopharm, vol. 4, no. 8, pp. 47-53 (1991)					
A57		Rostand et al., "Cholesterol and Cholesterol Esters: Host Receptors for Pseudomonas Aeruginosa Adherence," The Journal of Biological Chemistry, vol. 268, no. 32, pp. 24053-24059 (1993)					
A58		Rygus et al., "Inducible High-level Expression of Heterologous Genes in Bacillus Megaterium Using the Regulatory Elements of the Xylose-utilization Operon," Appl. Microbioo Biotechnol, vol. 35, pp. 594-599 (1991)					
A59		Rygus et al., "Molecular Cloning, Structure, Promoters and Regulatory Elements for Transcription of the Bacillus Megaterium Encoded Regulon for Xylose Utilization," Arch Microbiol, vol. 155, pp. 535-542 (1991)					
A60		Sauma et al., "Selective Release of a Glycosylphosphatidylinositol-anchored Antigen from the Surface of Shistosoma Mansoni," Molecular and Biochemical Parasitology, vol. 46, pp. 73-80 (1991)					
A61		Slein et al., "Partial Purification and Properties of Two Phospholipases of Bacillus Cereus," vol. 85, pp. 369-381 (1963)					
A62		Slein et al., "Characterization of the Phospholipases of Bacillus Cereus and Their Effects on Erythrocytes, Bone, and Kidney Cells," Journal of Bacteriology, vol. 90, no. 1, pp. 69-81 (1965)					
A63		Strong et al., "Cloning and Sequence Analysis of a Highly Polymorphic Cryptosporidium Parvum Gene Encoding a 60-Kilodalton Glycoprotein and Characterization of Its 15- and 45-Kilodalton Zoite Surface Antigen Products," Infection and Immunity, vol. 68, no. 7, pp. 4117-4134 (2000)					
A64		Suszkiw, J., "Broiler Chicks May Benefit From "Spicier" Feed," USDA Agricult. Research Service, pp. 1-2 (1997)					
A65		Sylvester, et al., "Adherence to Lipids and Intestinal Mucin by a Recently Recognized Human Pathogen, Campylobacter Upsaliensis," Infection and Immunity, vol. 64, no. 10, pp. 4060-4066 (1996)					
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mm2		Tauguchi et al., "Phosphatidyl Inositol-Specific Phospholipase C from Clostridium Novyi Type A," Archives of Biochemistry and Biophysics, vol. 186, no. 1, pp. 196-201 (1978)	
	A67	Turner, A.J., "Degradation of Glycosyl-phosphatidylinositol Anchors by Specific Phospholipases," Molecular and Cell Biology of Membrane Proteins: Glycolipid Anchors of Cell-Surface Proteins, Chapter 2, pp. 35-63 <i>Pub Date?</i>	
	A68	Van Deventer, S.H., "Anti-TNF Antibody Treatment of Crohn's Disease," ()	
mm2	A69	Volwerk et al., "Phosphatidylinositol-Specific Phospholipase C From Bacillus Cereus: Improved Purification, Amino Acid Composition, and Amino-Terminal Sequence," Journal of Cellular Biochemistry, vol. 39, pp. 315-325 (1989)	
	A70	You et al., "A Chemiluminescence Immunoassay for Evaluation of Cryptosporidium Parvum Growth in Vitro," FEMS Microbiol. Letters 136, pp. 251-256 (1996)	
	A71	You et al., "In-vitro Activities of Paromomycin and Lasalocid Evaluated in Combination Against Cryptosporidium Parvum," J. Antimicrobial Chemother, vol. 41, pp. 293-296 (1998)	
	A72	Zhao et al., "Directed Evolution Converts Subtilisin E into a Functional Equivalent of Thermitase," Protein Engineering, vol. 12, no. 1, pp. 47-53 (1999)	
mm2	A73	Zhao et al., "Molecular Evolution by Staggered Extension Process (StEP) in Vitro Recombination," Nature Biotechnology, vol. 16, pp. 258, 260 (1998)	
	A74	Association of American Feed Control Officials, Inc., Official Publication, Part 582, "Substances Generally Recognized as Safe in Animal Feeds, pp. 338-343 <i>Pub Date</i>	
	A75	Association of American Feed Control Officials, Inc., Official Publication 2000, Part 18, "Chemical-Preservatives," pp. 245-247	
mm2	A76	Association of American Feed Control Officials Inc., Official Publication, "Drug and Feed Additives Section 30, Enzymes," pp. 224-235 (1999)	
mm2	A77	Baird & Tatlock (London) Ltd., "Action of Phospholipase C on Influenza Virus, Nature, vol. 204, no. 4959, pp. 781-782 (1964)	
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mm2		A78	Frost & Sullivan, "U.S. Pharmaceutical Products for Food-Animals Report," pp. 5245-54 (1995)				
		A79	Official Journal of the European Communities 29.12.98, Council Regulation No. 2821/98 Concerning Directive 70/25, 1998,				
mm2		A80	Enzyme Nonmenclature, "Enzyme List," Academic Press (1992)				
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